

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1-46. (canceled)

47. (Currently amended) A conductive trace at least partially formed on at least one semiconductor device component, comprising a plurality of superimposed, contiguous, mutually adhered layers, each of ~~said~~the layers comprising conductive polymer, at least a portion of ~~said~~the conductive trace being configured to extend and conduct electrical signals along a plane which is parallel to a plane in which the at least one semiconductor device component is located.

48. (Currently amended) The conductive trace of claim 47, wherein ~~said~~the conductive polymer comprises a thermoplastic conductive elastomer.

49. (canceled)

50. (previously presented) The conductive trace of claim 47, configured to be carried by a single semiconductor device component.

51. (previously presented) The conductive trace of claim 47, configured to at least partially electrically connect two semiconductor device components.

52. (Currently amended) A semiconductor device comprising:
a semiconductor device component; and
at least one conductive trace carried by ~~said~~the semiconductor device component, ~~said~~the at least one conductive trace including a plurality of superimposed, contiguous, mutually adhered

layers, each of ~~said~~the layers comprising conductive polymer, at least a portion of ~~said~~the at least one conductive trace being configured to extend and conduct electrical signals along a plane which is parallel to a plane in which ~~said~~the at least one semiconductor device component is located.

53. (Currently amended) The semiconductor device of claim 52, wherein ~~said~~the at least one conductive trace is substantially entirely carried by ~~said~~the semiconductor device component.

54. (Currently amended) The semiconductor device of claim 53, wherein ~~said~~the semiconductor device component comprises a layer of a carrier substrate.

55. (Currently amended) The semiconductor device of claim 53, wherein ~~said~~the semiconductor device component comprises a dielectric layer disposed on an active surface of a semiconductor die.

56. (Currently amended) The semiconductor device of claim 52, wherein ~~said~~the conductive polymer comprises a thermoplastic conductive elastomer.

57. (canceled)

58. (Currently amended) The semiconductor device of claim 52, wherein ~~said~~the at least one conductive trace communicates with a contact of ~~said~~the semiconductor device component.

59. (Currently amended) The semiconductor device of claim 58, wherein ~~said~~the semiconductor device component comprises a carrier substrate.

60. (Currently amended) The semiconductor device of claim 58, wherein ~~said~~the semiconductor device component comprises a semiconductor die.

61. (Currently amended) The semiconductor device of claim 58, wherein ~~said~~the semiconductor device component comprises a packaged semiconductor device.

62. (Currently amended) The semiconductor device of claim 52, wherein ~~said~~the semiconductor device component comprises leads.

63. (Currently amended) The semiconductor device of claim 62, wherein ~~said~~the at least one conductive trace contacts one of ~~said~~the leads.

64. (Currently amended) A semiconductor device assembly, comprising:
a carrier including contacts and carrying circuitry in communication with ~~said~~the contacts; and
at least one semiconductor die adjacent ~~said~~the carrier, ~~said~~the semiconductor die including bond pads; and
conductive elements extending between and contacting contacts of ~~said~~the carrier and
corresponding bond pads to electrically connect circuitry of ~~said~~the at least one
semiconductor die with ~~said~~the circuitry of ~~said~~the carrier, each of ~~said~~the conductive
elements including a plurality of superimposed, contiguous, mutually adhered layers, each
of ~~said~~the layers comprising conductive material.

65. (Currently amended) The semiconductor device assembly of claim 64, wherein ~~said~~the carrier comprises a carrier substrate.

66. (Currently amended) The semiconductor device assembly of claim 64, wherein ~~said~~the carrier comprises leads.

67. (Currently amended) The semiconductor device assembly of claim 64, wherein ~~said~~the conductive material comprises a thermoplastic conductive elastomer.

68. (Currently amended) The semiconductor device assembly of claim 64, wherein ~~said~~the conductive material comprises a metal.

69-74. (canceled)

75. (Currently amended) A semiconductor device assembly, comprising:
a first semiconductor device component including at least one first contact pad;
a second semiconductor device component including at least one second contact pad; and
at least one conductive element in contact with both ~~said~~the at least one first contact pad and
~~said~~the at least one second contact pad, ~~said~~the at least one conductive element
comprising a plurality of superimposed, contiguous, mutually adhered layers comprising
conductive material.

76. (Currently amended) The semiconductor device assembly of claim 75, wherein ~~said~~the conductive material comprises a conductive elastomer.

77. (Currently amended) The semiconductor device assembly of claim 75, wherein ~~said~~the conductive material comprises a metal.

78. (Currently amended) The semiconductor device assembly of claim 75, wherein at least one of ~~said~~the first semiconductor device component and ~~said~~the second semiconductor device component comprises a semiconductor die.

79. (Currently amended) The semiconductor device assembly of claim 78, wherein at least one of ~~said~~the first semiconductor device component and ~~said~~the second semiconductor device component comprises a packaged semiconductor die.

80. (Withdrawn and currently amended) The semiconductor device assembly of claim 75, wherein each of ~~said~~the first semiconductor device component and ~~said~~the second semiconductor device component comprises at least one semiconductor die.

81. (Currently amended) The semiconductor device assembly of claim 75, wherein at least one of ~~said~~the first semiconductor device component and ~~said~~the second semiconductor device component comprises a carrier substrate.

82. (Currently amended) The semiconductor device assembly of claim 81, wherein ~~said~~the carrier substrate includes a support structure and at least one conductive trace carried by ~~said~~the support structure and in communication with ~~said~~the at least one first contact pad thereof.

83. (Currently amended) The semiconductor device assembly of claim 82, wherein at least one of ~~said~~the at least one conductive trace and ~~said~~the support structure comprises a plurality of superimposed, contiguous, mutually adhered layers of material.

84. (Currently amended) The semiconductor device assembly of claim 75, wherein ~~said~~the at least one conductive element is located on a surface of each of ~~said~~the first and second semiconductor device components.

85. (Currently amended) The semiconductor device assembly of claim 84, wherein ~~said~~the at least one conductive element extends across a peripheral edge of at least one of ~~said~~the first and second semiconductor device components.

86. (Withdrawn and currently amended) The semiconductor device assembly of claim 80, further comprising a carrier substrate upon which at least one of ~~said~~the semiconductor dice is disposed.

87. (Withdrawn and currently amended) The semiconductor device assembly of claim 86, further comprising at least one other conductive element connecting at least one other contact pad of at least one of ~~said~~the semiconductor die to at least one contact pad of ~~said~~the carrier substrate.

88. (Withdrawn and currently amended) The semiconductor device assembly of claim 87, wherein ~~said~~the at least one other conductive element comprises a plurality of superimposed, contiguous, mutually adhered layers of conductive material.

89. (Withdrawn and currently amended) The semiconductor device assembly of claim 88, wherein ~~said~~the conductive material comprises a conductive elastomer.

90. (Withdrawn and currently amended) The semiconductor device assembly of claim 88, wherein ~~said~~the conductive material comprises metal.

91-109. (not entered)

110. (Currently amended) A conductive trace at least partially formed on at least one semiconductor device component, comprising a plurality of superimposed, contiguous, mutually adhered layers, each of ~~said~~the layers comprising the same conductive polymer material, at least a portion of ~~said~~the conductive trace being configured to extend and conduct electrical signals along a plane which is parallel to a plane in which the at least one semiconductor device component is located.

111. (previously presented) The conductive trace of claim 110, wherein conductive polymer material comprises a thermoplastic conductive elastomer.

112. (previously presented) The conductive trace of claim 110, configured to be carried by a single semiconductor device component.

113. (previously presented) The conductive trace of claim 110, configured to at least partially electrically connect two semiconductor device components.

114. (Currently amended) A semiconductor device comprising:
a semiconductor device component; and
at least one conductive trace carried by ~~said~~the semiconductor device component, ~~said~~the at least one conductive trace including a plurality of superimposed, contiguous, mutually adhered layers, each of ~~said~~the layers comprising the same conductive polymer material, at least a portion of ~~said~~the conductive trace being configured to extend and conduct electrical signals along a plane which is parallel to a plane in which ~~said~~the at least one semiconductor device component is located.

115. (Currently amended) The semiconductor device of claim 114, wherein ~~said~~the at least one conductive trace is substantially entirely carried by ~~said~~the semiconductor device component.

116. (Currently amended) The semiconductor device of claim 115, wherein ~~said~~the semiconductor device component comprises a layer of a carrier substrate.

117. (Currently amended) The semiconductor device of claim 115, wherein ~~said~~the semiconductor device component comprises a dielectric layer disposed on an active surface of a semiconductor die.

118. (Currently amended) The semiconductor device of claim 114, wherein ~~said~~the conductive polymer material comprises a thermoplastic conductive elastomer.

119. (Currently amended) The semiconductor device of claim 114, wherein ~~said~~the at least one conductive trace communicates with a contact of ~~said~~the semiconductor device component.

120. (Currently amended) The semiconductor device of claim 119, wherein ~~said~~the semiconductor device component comprises a carrier substrate.

121. (Currently amended) The semiconductor device of claim 119, wherein ~~said~~the semiconductor device component comprises a semiconductor die.

122. (Currently amended) The semiconductor device of claim 119, wherein ~~said~~the semiconductor device component comprises a packaged semiconductor device.

123. (Currently amended) The semiconductor device of claim 114, wherein ~~said~~the semiconductor device component comprises leads.

124. (Currently amended) The semiconductor device of claim 123, wherein ~~said~~the at least one conductive trace contacts one of ~~said~~the leads.